



Rocket scientist

Vrushalis OQQ Certification April 2020

Vrushali Nerpawar | April 2020

“It’s not rocket science” describes something that’s not hard to understand. So...how difficult *is* rocket science?

It’s pretty complex! I’m currently testing new ground station software to make sure it works with existing satellite science missions. The ground stations communicate with 40 different satellite science missions, and they all have to interact with our new software and existing stations. We do multiple levels of testing, and I’m working on a level-6 test, which follows five other levels of testing.

When installing new software or hardware, we need to ensure that the ground stations meet the unique requirements of each of the 40 missions. In testing software, we have specific data rates [transmission speeds, or the number of bits of information transferred per second] and thermal parameters [temperature-specific

measurements of heat conduction in the components], and if anything is out of place, the communications won't happen. On the hardware side, cables have to be moved, fabricated, and tested with data flow.

All of this is part of a 2-year process, and it's up to us to make sure everything is correct in order for the missions to succeed.

[Interview](#)



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